

## MR16 3LED 20W Halogen Equivalent



### Part Number

BLM1653M-NVW32L

BLM1653W-NVW32L

BLM1653WD-NVW32L

BLM1653D120-NVW32L

LIMITED DIMMING

### CERTIFICATE



IEC/EN 55015

IEC/EN 61547

IEC/EN 61000-3-2

IEC/EN 60111-3-95

IEC/EN 62838

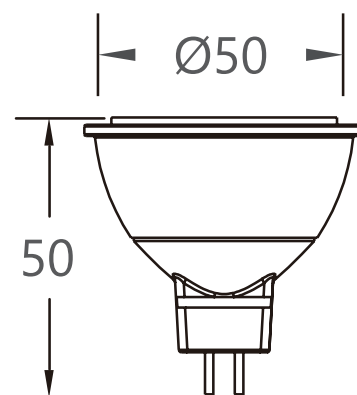
### Specification

Voltage(V)	12
Power(W)	4
Frequency(Hz)	50-60
Flux(lm)	360
Useful Flux(lm)	300
Efficiency(lm/w)	90
Power Factor	>0.7
CCT Option(K)	2700
CRI	80+
Beam Angle(°)	20/40/60/100
Base	GU5.3
Energy Efficiency Class	F
Operating Temperature(°C)	-20~40

**COLOR  
PRO**  
R9>50  
R13>85  
R15>85

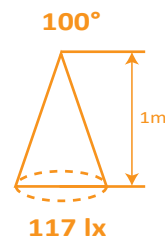
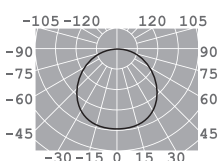
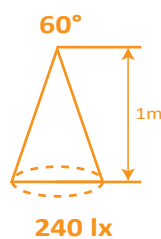
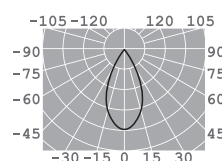
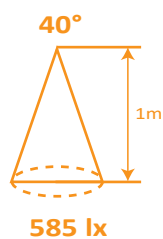
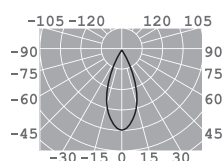
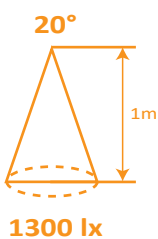
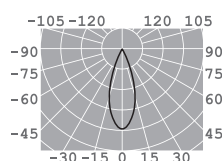
## 2D Diagram

Dimmension(mm)	Ø50*50
Weight(g)	42g
Base	GU5.3



Base Type : GU5.3

## Luminous Intensity Distribution Diagram



## Package

	G.W	V.W	Size	Carton Number
White Box	60g	-	53*53*83mm	1pc of lamp
Outer Carton	12.5Kg	11.95Kg	590*304*400mm	200pcs of white box

## Safety Instructions

### Warning

- The retrofits & fixtures should be used with the specified wattage in appropriate equipment or retrofits & fixtures house to prevent breakage or overheating.
- Operate the retrofits & fixtures in the appropriate position if specified to prevent damage or overheating.
- Turn off the electrical power in the conditions of installation, removing, or cleaning the retrofits & fixtures.
- Keep the retrofits & fixtures out of reach to the children.

### Environment Notice

- Please avoid installing or operating the retrofits & fixtures under the following conditions:
- A place where the retrofits & fixtures is hit by rain or water drops unless necessary ingress protection is marked.
- A place with high humidity unless necessary ingress protection is marked.
- A place where the atmosphere contains inflammable substances such as gasoline, lacquer, or dust.
- A place near flammable objects such as gasoline, spray, chemicals, paints, oil, ...etc.
- An acid environment
- A place that is likely to be impacted by force or vibration

### Installation instructions

- Remove package before installation of retrofits & fixtures.
- Follow installation instructions in the package.
- Do not use bare hands or stained gloves to install the new retrofits & fixtures or remove the existing retrofits & fixtures.

### False operations

- To prevent damage, burn or injury, please avoid the following operations:
- Cover retrofits & fixtures with paper, fabric, or any flammable material to avoid burning.
- Insert metal object into the gap of retrofits & fixtures base.
- Disassemble or reconstruct the retrofits & fixtures
- Stare directly at the retrofits & fixtures while the retrofits & fixtures is operating,
- Wash the retrofits & fixtures with water or any detergent
- Install the retrofits & fixtures in the sealed fixture unless particularly remarked in datasheet.
- Install the retrofits & fixtures on a damaged socket.
- Paint or put colors on the retrofits & fixtures.

## Transformer & Dimmer Selection Guide (for 12V device)

### 12V AC Transformer:

There are two types transformer available commercially:

#### A. Magnetic AC Transformer:

The traditional heavy transformer without electronic components can be coped with our products with good compatibility.

#### B. Electronic AC Transformer:

The traditional economic transformer used mainly for MR16 halogen lamp, usually performs poor compatibility for low voltage LED lamp. We don't suggest this type of transformer due to the frequent problems such as no light or flicker..

### 12V DC Transformer:

There is no problem to use DC transformer with our low voltage products due to its high stability.

### Dimmer Selection:

When 12V DC transformer is used, the traditional Triac dimmer cannot work. Therefore, the dimming effect of low voltage LED Lamp heavily depends on the AC transformer. The different brands of dimmers also affect the dimming performance. Please contact us if you want to know further dimming effect of our low voltage LED Lamp.

## Dimming Guide (Dimmable Device)

- BLTC's dimmable retrofits & fixtures can work with most of leading edge (TRIAC) and trailing edge dimmers, however 100% compatibility cannot be guaranteed due to the variety and quality of dimmers in the market. Some of the compatibility issues may include audible noise, flickering and higher light output when the dimmer is set at a certain level.
- Most (non-LED dedicated) dimmers can be loaded with LED light sources up to 20% of dimmer specified maximum power. Example: Dimmer 600W -> 20% = 120W, which means that e.g. up to 12 pcs 10W LED light sources can be connected.
- When connected to a dimmer in its off-state, a LED light source may still emit a small, yet visible amount of light, while a low quantity of LED light sources is connected.
- The time it takes to turn on the light may vary with different kind of dimmer switch.
- Various dimmer suppliers offer "active loads" to optimize dimming performance in case of light source-dimmer system issues.
- Do not use dimmer with non-dimmable bulbs to avoid damage and burning.
- Mixed loads may cause unexpected dimming behavior or even result in defects, for which BLTC is not responsible.
- Sometimes the retrofits & fixtures may fail to dim when working with the following kinds of dimmers.
  - sensor dimmers
  - stepping dimmers
  - remote control dimmers
  - dimmers with memory
- When more than one bulb is connected to a dimmer, the brightness of each bulb may vary depending on its characteristic.
- Minor noises may occur when turning dimmers.
- If the light flickers when dimming, please adjust the dimmer until the light is tuned to a steady level.